UTM PILOT PROGRAM BACKGROUND

The Unmanned Aircraft System (UAS) Traffic Management (UTM) Pilot Program (UPP) was established in April 2017 per the Federal Aviation Administration (FAA) Extension, Safety and Security Act of 2016, Sec. 2208 to identify the initial capabilities required to support UTM operations. The UTM ecosystem is part of the Air Traffic Management System and complementary to Air Traffic Control. UTM services are targeted toward operations of UAS at flight levels below 400 feet. UTM was initially a research project conducted by NASA that subsequently became a joint effort between NASA and the FAA. The Congressionally directed UPP was established to ensure that NASA research was transferred to the FAA with the intent of developing, demonstrating, and providing enterprise services to support the implementation of UTM operations.

UPP PHASE ONE

On January 14, 2019, U.S. Department of Transportation Secretary Elaine L. Chao, announced the FAA's selection of three FAA UAS Test Sites to partner with the agency in the UPP. UTM services demonstrated in UPP Phase One included: (1) the exchange of flight intent among operators, (2) the generation of notifications to UAS Operators regarding air and ground activities relevant to their safe operation, known as UAS Volume Reservations (UVRs), and (3) the ability to share UVRs with stakeholders, including other UAS Service Suppliers (USS) and the Flight Information Management System (FIMS).

UPP Phase One demonstrations completed in August 2019 and wrapped up with a UPP Demonstration Report and lessons learned.

UPP PHASE TWO

As directed by the FAA Reauthorization Act of 2018 (H.R. 302 SEC. 376(b)), the UPP is required to meet additional objectives prior to completion. These objectives include testing of Remote Identification (RID) technologies and operations with increasing volumes and density. This testing will be conducted in cooperation with NASA and Industry stakeholders, including those selected under UAS Integration Pilot Program (IPP) and FAA UAS Test Sites.

The FAA will award the second phase of work in order to evaluate results and determine the appropriate next steps, moving toward the development and deployment of RID technologies in increasingly complex environments to enable Beyond Visual Line of Sight (BVLOS) operations.

FREQUENTLY ASKED QUESTIONS

What is the purpose of the UTM Pilot Program (UPP)?

The purpose of the UPP is to evaluate results and determine the appropriate next steps, moving toward the development and deployment of prototype enterprise services into the FAA framework to support initial UTM operations. These enterprise services will be used to share intent and situational awareness information with the FAA and UTM operators.

What is Remote ID?

Remote Identification is the ability of a UAS in flight to provide identification information that can be received by other parties. It is the next step to enable safe, routine drone operations by allowing the public, the FAA, law enforcement, and Federal security agencies to identify UAS flying in their jurisdiction.

How does the UPP complement the IPP?

The UPP is a Congressional directive to the FAA and NASA to establish a Research Transition Team and partner with industry to help advance the safe integration of unmanned aircraft into the national airspace. The IPP is a Presidential directive to the Secretary of Transportation and FAA to create a partnership framework for private sector and local/state/tribal governments to help direct broader national policy.

The IPP's purpose is to advance the UAS industry by informing regulations that permit more complex, demand-driven UAS operations and push the boundaries of UAS use. In support of future UAS operations, the UPP's purpose is to pilot a UTM ecosystem built on architectural infrastructure and data services that allow USSs, operators, and government organizations to communicate and share information that will move toward the FAA's future implementation of UTM.

How will the UPP support the implementation of UTM?

The UPP will evaluate the FAA and NASA's UTM research technologies. The results from the UPP will provide a proof of concept for UTM capabilities currently in research and development and will serve as the basis for initial deployment of UTM capabilities.

What happens after FAA has completed UPP Phase 2?

The next step is to take the results from UPP Phases 1 and 2 and inform stakeholders, enabling deployment of enterprise capabilities, including RID services. The lessons learned from UPP will support ongoing policy and technology advancement efforts toward enabling BVLOS operations.

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OTHER HELPFUL WEBSITES

Secretary Elaine L. Chao Announcement for UPP Phase One

https://www.faa.gov/uas/programs_partnerships/DOT_initiatives/

FAA UTM

https://www.faa.gov/uas/research_development/traffic_management/

FAA UTM Pilot Program

https://www.faa.gov/uas/research_development/traffic_management/utm_pilot_program/

FAA UAS Test Sites

https://www.faa.gov/uas/programs_partnerships/test_sites/

NASA UTM

https://utm.arc.nasa.gov/index.shtml

UTM POINTS OF CONTACT

FAA UTM – FAAUTM@faa.gov

Praveen Raju, FAA – Praveen.Raju@faa.gov

Joey Rios, NASA – Joseph.L.Rios@nasa.gov